CONCORDIA UNIVERSITY

INTERNAL MEMORANDUM

US-79-11-D7

TO Mr. John Noonan, Secretary of Senate

FROM Mona Osborne

DATE December 4, 1979

Subject: Proposal for an Institute for Cooperative Education

The attached document, Proposal for an Institute for Cooperative Education (ASC 79-12-D1), was approved by members of the Council of the Faculty of Arts and Science on Friday, November 30, 1979.

Mona Osborne

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"The Only Training for Occupation is Training Through Occupations"

John Dewey

Proposal for an Institute for Cooperative Education at Concordia University

FOR THE COMMITTEE FOR THE
INSTITUTE FOR COOPERATIVE EDUCATION

COMMITTEE MEMBERS:

P. Albert
W. Cozens
J. Jenkins
A. Lajoie
A. Rahn
G. Trudel
R. Wall
P. Widden

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DEFINITION: COOPERATIVE EDUCATION IS A PROGRAMME IN WHICH A STUDENT ALTERNATES PERIODS OF FORMAL ACADEMIC TRAINING WITH STUDY-RELATED, PAID WORK IN THE PRIVATE OR THE PUBLIC SECTORS.

I. INTRODUCTION

i) Origins and growth of Cooperative Education

The first modern cooperative education scheme was begun at the University of Cincinnati in 1906. Herman Schneider, a professor of engineering, had a conviction that practical experience in certain areas of engineering was of greater value than classroom exposure to such topics. He had also noted that most of his students wanted to acquire practical experience during their university stay, and that many needed the financial support work could supply. Schneider managed to persuade several Cincinnati industries to engage some of his students, who then alternated one week of on-campus study with a week of work in an engineering-related job. These students were divided into two groups, so that some students were always in the classroom, while industries had positions occupied on a full-time basis. Benefits to all parties of this cooperative relationship between the academic institution and the organization providing the work-situation were almost immediately

felt. Such benefits are dealt with elsewhere in this document.

In spite of the success of the venture, it was three years before a second programme in cooperative education was initiated, (in 1909 by a technical institution which later became Northeastern University of Boston). By 1920, a total of 10 post-secondary institutions, all situated in urban centers, were offering cooperative education programmes - all but one in engineering. The University of Cincinnati introduced the first non-engineering programme, in business, in 1919.

In 1921, the first cooperative programme in a wholly liberal arts and science institute was introduced at Antioch College, Yellow Springs, Ohio. The non-vocational nature of this programme, operating in a rural setting, radically departed from the accepted dogma that cooperative programmes could only function in applied curricula, within centers of dense industry. "Antioch as a college of liberal arts and sciences thinks of the plan also as contributing to liberal education. When the student leaves the sheltered environment of the campus for his regular work assignments, he is at least in a position to make direct observations about contemporary civilization. He may make distinctions between good ethics and bad not only in jobs, but also in communities; he may see tolerance and intolerance at work; he may appraise the affects of social planning or the lack of it; he may acquire greater sensitivity to beauty through exposure to art and music; he may learn the difference between a creative individual and a passive one. With this kind of first-hand knowledge about society today, students are in a better position - Antioch feels - to comprehend the past and the various theories about human progress. They are also more likely to assimilate a liberal education in a way that means something in today's living".[1]

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1. Henderson, A.D. and Hall, D., Antioch College, The Design for Liberal Education, Harper and Row, 1946.

Even though Antioch College broke new ground in cooperative education, it was not until 1932 that a second liberal arts institution, Bennington College in Vermont, introduced a fieldwork programme. (Many similar programmes exist in the humanities disciplines in American colleges today, but these still constitute a relatively small proportion of the total number of cooperative schemes in operation).

From 1921 to 1930, five more American institutions introduced cooperative engineering programmes. In spite of the Depression and World War II, an additional five cooperative plans were put into operation between 1931 to 1945. By 1953, forty-three programmes were operating; by 1960, seventy-one had begun; by 1971, 225 colleges and universities in the United States and Canada had implemented the cooperative concept of education in 165 different curricula, demonstrating the applicability of this scheme to virtually all fields of post-secondary study.

ii) Problems of implementing Cooperative Programmes: The Coordinator

During the first fifty years of development of cooperative education, the disruptive effect it was feared that the scheme would have upon traditional values in education, and upon the accepted manner of entry into the working world generated resistance to the plan in faculty, labour unions and professional organizations. While such resistance continues, it has diminished considerably as time and experience provide the answers to many of the questions deriving from uncertainty. Cooperative education is a complement to, not a replacement of, traditional academic programmes. In the United States, 40,000 co-op jobs were provided in 1971 by 10,000 employers, and a large number of these jobs were tailored specifically for the cooperative experience, and did not infringe upon existing positions of employment.

Other jobs provided experience which previously could be acquired only after graduation. (Obviously one of labour's chief problems with the concept lies in its difficulty in fitting the student during his work terms into the collective arrangement, and hence in exercising any control over the student's actions during a work stoppage. This problem remains without a general solution, but in the case of the most successful cooperative operations, honest and truthful relations between coordinators and labour officials have been important elements of this success).

One of the continuing challenges in implementing a cooperative programme is the search for suitable work assignments. The initial misgivings of industry towards the cooperative concept have largely disappeared, but even given industry's present positive attitude, the actual job must be carefully selected, developed, and described, and the student placed in that job selected with equal care. The job must be continually evaluated for its suitability, and the performance of the students in filling the job so as to satisfy the needs of industry must similarly undergo constant evaluation. In early cooperative programmes, these tasks of finding, filling, and evaluating work assignments were undertaken by academic personnel involved in the various plans. As the size of these programmes grew, and as they were extended into fields of learning in which faculty had limited contact with or understanding of business, the function of liaison between university and industry became a specialized task, and a specialist - the "coordinator" - was appointed to carry it out. In all successful cooperative education plans today, a coordinator and his staff are central to this success.

iii) Recent growth of cooperative education

Cooperative education entered into its period of most rapid growth in 1957, as educators looked for ways to deal with burgeoning numbers of university candidates. Funded by grants from industry, research foundations, and the United States government, conferences were set up and studies commissioned in wider fields. In 1962, a United States National Commission for Cooperative Education was established with a permanent staff, to promote the interests of the cooperative concept through publications, media and government lobbying. In September of 1963, the Cooperative Education Association (CEA) was formed to provide an umbrella society for all persons and institutes having an involvement in the field. (Earlier associations of cooperative institutions tended to be primarily concerned only with the Engineering dimension of cooperative education, and such associations or their descendents continue to function in an important way today). At Northeastern University in 1965, a Center for Cooperative Education was set up to act as an information center for institutes studying the feasibility of cooperative education, and to train coordinators for such programmes. Several similar centers now operate in the United States.

iv) Cooperative education in Canada

The first cooperative education programme in Canada was introduced in 1957, in Engineering at the University of Waterloo. Although still strongly emphasizing Engineering, Waterloo has expanded its programmes over the years to include twelve disciplines at the undergraduate level, and seven at the post-graduate level, and now about 5,000 (approximately half of the university's students) are in cooperative programmes. Waterloo has served as the model for most of the seventeen post-secondary Canadian institutions which

presently offer cooperative schemes. Its trimester system, its pattern of alternating work-term and study-term, and its negotiated job-placement plan (in which a computer assists in the best possible match-up between student and industry, after a series of job interviews), have become accepted as the norm in Canadian programmes. Engineering and Economics are heavily stressed and presently only about ten percent of co-op students are enrolled in programmes outside the technical and business fields. Of three Quebec institutions which are involved in cooperative education, only the Université de Sherbrooke offers programmes other than Engineering and Economics, accounting for only a very small part of the cooperative enrollment.

The Government of Canada has only recently given support to the cooperative concept of education. In October 1976, a modest funding was promised to help set up the administrative machinery for new programmes involving full-time students. Effective participation in such schemes on the part of the Federal Government is constrained by jurisdictional problems, but at least recognition has been given by the central government to its importance. The following excerpts from an address given by the Honourable Bud Cullen, Minister of Employment and Immigration (1977) suggest that an impetus is about to be supplied by Ottawa for a growth in Canadian cooperative ventures, particularly in larger cities:[2]

> "Co-op education being what it is, is bound to expand in the future";
>
> "I view cooperative education and work-experience programmes as one of the most essential and vital links between the education system and the world of work";
>
> "It is interesting to note that, of the 5 largest co-op institutions in Canada, not one is located in any of our metropolitan areas. Toronto, Montreal, and Vancouver, and other large urban centers all seem to offer obvious potential for expansion of co-op education".

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2. Cullen, Honourable Bud, Minister of Employment and Immigration, Government of Canada. Keynote Address to the Canadian Association for Cooperative Education, London, Ontario, Aug. 29, 1977.

II. RATIONALE FOR PROPOSING A COOPERATIVE EDUCATION PROGRAMME AT CONCORDIA

To members of this committee, it has been obvious for some time that Concordia University is in a unique position to initiate cooperative education and that it would be totally consistent with its traditions to offer such an opportunity to its students. For years, we have had students already employed in industry who came to Concordia University part-time in the evening. It would not be difficult to offer a cooperative programme with this approach as a rather novel "twist" on the traditional cooperative programme, while at the same time offering the more traditional approach as well. In this manner, Concordia University can take advantage of its already existing pool of jobs and students.

Many students come to university to obtain degrees in a variety of subjects. The students, after graduating, often go into jobs in which their university training is not used directly, but rather is used to prove that the students have a capacity to learn. With their theoretical knowledge, students are often employed by industry, where they are trained for their jobs to become useful to that industry eventually; there is often no connection between the two types of experiences. In the times of high employment this system may be tolerated, although it is wasteful. In these times, however, when unemployment is critically high, a student with an academic degree may find him/herself at a great disadvantage in comparison to a CEGEP graduate who may have more technical, job-related training. The cooperative education programme proposed here is designed to enable students to combine both the academic training of a university programme with related job experience in such a way as to make the graduates more "marketable" directly after graduation.

Before bringing this proposal to the University, we felt it necessary to consult both with academic communities and with local industry. We needed

to draw on other people's experience and to become sensitized to the question of whether such a proposal would be favorably received by potential employers.

We have drawn very heavily on the experience of people from the University of Waterloo and Sherbrooke and to a lesser extent from the Centre for Cooperative Education at Boston's Northeastern University, by letter, telephone and personal visits. We have also contacted many industries in the Montreal area and conducted group interviews with a number of business representatives. A list of businesses contacted is given in Appendix I.

The recent formation of one large faculty of Arts and Science within Concordia University, with the recommendation to form a number of small units, has stimulated our group to bring forward this proposal. We consider the proposal timely because of the high unemployment rate among young people (50% of Canada's unemployed are under 25).[3]

We recognize that in Canada there are at present a number of cooperative education programmes in operation (See Appendix II), but that the largest is that at the University of Waterloo. The University of Waterloo has in the past recruited students from the province of Quebec, and has also placed many students into jobs in this province. However, the changing climate in Quebec, especially the need for business to be able to operate in French, has reduced the employability of Waterloo's unilingual Anglophone students. It is clear that for many careers in Quebec there is a need for university graduates who are functional in both French and English. Because of the large community in the Montreal area, the concentration of industry in the region and the role of Concordia University, it is logical that Concordia become a leader among Quebec's English universities in the field of cooperative education.

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3. Collins, Ron, Half of Canada's Unemployed are Less than 25 years old. The Montreal Star, April 17, 1978, Page A3.

III. VALUE OF COOPERATIVE EDUCATION PROGRAMMES

In a work-study programme the work experience is a laboratory where the student makes use of factual knowledge gained in the university and applies it to the real world. This extension of the university education benefits not only the student, but also the employer, the university, and the community at large.

Some of these benefits:

a) The student -

i) earns wages which can be used to finance studies;

ii) integrates academic studies with work experience, and the student's awareness of the importance of both is stimulated;

iii) is encouraged to assume responsibility, to acquire good work habits, and to adopt the attitudes necessary for successful job performance;

iv) through exposure to a variety of work situations, can more easily evaluate his or her own personal career goals.

b) The employer -

i) the private sector assesses the skills, performance, and motivation of potential employees;

ii) there is a channel whereby potential employers can have some imput into the educational process;

iii) the business community is made more aware of the resources available at the university from which it may draw.

c) The university -

i) makes use of resources outside of its own physical and financial confines;

ii) responds more directly to specific community needs;

iii) will attract more students of a higher quality to the existing academic programmes;

iv) through the feedback from employers and the success of its graduates, will be better able to assess its performance in attaining some of its educational objectives;

v) will have a direct mechanism for assessing the employment opportunities for its graduates.

d) The community -

i) since graduates will be more qualified for direct entry into the job market, job dissatisfaction and unemployment will be measurably reduced;

ii) university graduates will be more likely to remain in and contribute to the community;

iii) closer interaction between the community and the university will be developed.

We feel that there are many benefits which will accrue to the university with the development of a cooperative education unit. The experience of other universities has shown that cooperative programmes increase the number and quality of students enrolling in the departments involved. In this critical period of declining enrollments, any programmes which can slow down or even reverse this trend at Concordia whilst fulfilling a legitimate academic purpose should be viewed with favour.

Because of the close interactions that necessarily occur, it is also the experience of other cooperative programmes that the relationship between the university and the private sector is improved. This improved relationship often results in an increased willingness by industry to invest time as well as money for the support of education in the academic institution. In the science areas, this often extends to financial support for project-oriented research by faculty members. At a time when research grants are increasingly subjected to government cutbacks, such support could be vital in establishing a healthy and well-respected research effort at Concordia. It is also clear that in some cases the development of new programmes has resulted from cooperation between the university and the private sector.

Through the above mechanisms, the image of Concordia University in the community at large could only be improved. This may then be reflected in higher enrollments, even in those areas where no cooperative programme is involved.

IV. ORGANIZATION OF A PROPOSED COOPERATIVE EDUCATION INSTITUTE

i) Position of cooperative institute within Concordia University

The creation of "small units" in the newly established faculty of Arts and Science leads to a natural emphasis of these subjects within any "Institute". Cooperative education has, however, been proven successful in a wide variety of subjects and there could be no objection from members of the Institute to extending their services to departments outside of the faculty of Arts and Science if such departments should be interested in the concept of cooperative education.

In fact, such an extension may even be desirable in as far as the availability of jobs and programme coordination is concerned.

ii) Administrative structure

Any organization requires an organizational structure which responds both to its internal and external environments.

There are three broad areas of activity which must be handled by this structure. These are:

1. Student centered - the administration, registration and job matching of students in the main administrative function of the General Secretariat;
2. Programme centered - the development of new and the streamlining of old programmes must be continuously undertaken. Feasibility studies, feedback evaluation would be the integral part of these processes;
3. Industry centered - a close liaison with industry must be maintained. This will enable the IFCE to respond as fast as is academically possible to the changing dynamics of industrial development. It will allow industry to have some impact on programmes.

In order to fulfill these needs, the following structures will be created.

iia) Executive committee -

The governing body of the Institute for Cooperative Education will be an executive committee called the "Committee for the Institute for Cooperative Education" (CFICE). This committee will determine policy within the small unit and will develop and revise when necessary its own by-laws. The responsibility of this body will be to act as the final arbiter in any dispute relating to the cooperative education programme. It will be governed in its actions by the policy and by-laws of Division IV, the Faculty of Arts and Science and Concordia University. The committee will consist of :- (1) Fellows of the Institute - individuals involved in the organization of programmes within the Institution. These Fellows will be drawn from the academic community, and appointed for a three-year term, once renewable, by the Provost (they would not receive any extra payment). (2) Student Fellows - students chosen by their peers to represent the student body enrolled in the cooperative programme, comprising one-third of the members of the committee. (3) The Coordinator of the Institute - ex-officio. The Committee will select its own chairman and secretary from among its membership.

iib) Coordinator for cooperative education -

The Coordinator of the Institute will be appointed by the Vice-Rector, Academic for Arts and Science upon recommendation of the Provost. The Provost will consult the Executive Committee before making this recommendation. This will be a paid administrative position, whose functions are described in Appendix III. The Coordinator would be responsible for budget preparation and management, student job matching, industrial liaison and office administration.

ii) Sub-committees -

Sub-committees will be appointed for special purposes:

A. Programme sub-committees -- Each programme within the Institute for Cooperative Education (IFCE) will have a sub-committee of the CFICE. Each faculty member on the sub-committee would be appointed by the Provost upon recommendation of the Department concerned in the programme.

B. Industrial sub-committee -- A sub-committee will be formed whose function will be to act as liaison between the CFICE and industry. Half of its members would be drawn from students and faculty and the rest from industry.

C. CEGEP sub-committee -- A sub-committee to act as link between CEGEPs in Montreal and the cooperative education programme would be constituted. It would consist of half of its members from CEGEPs and half from students and faculty.

All the above sub-committees would designate one faculty member to sit on the CFICE.

D. Student sub-committee -- Students enrolled in the cooperative programme would elect a student committee whose responsibility would be to organize the extramural part of the student's education within the small unit. This sub-committee would also appoint student representatives onto the CFICE and all other sub-committees.

iid) Fellows -

A Fellow's first contact with the Institute would be as a member of a departmental programme committee. On approval of a programme, members of the programme committee would become members of an Institute programme sub-committee and therefore be considered as possible fellows of the Institute.

The duties of a Fellow will include the counselling of students in the programme at all stages. The Fellow will serve as the student's first contact in case of any complaints. The Fellow will be expected to read and evaluate work reports written by his students. Fellows should also be available for various sub-committee work that may be required from time to time by the CFICE or the programme sub-committees.

V. OPERATIONAL PROCEDURES OF THE COOPERATIVE INSTITUTE

i) Mechanisms for new programmes

Success of any programme depends entirely on the full support of the department(s) involved. For this reason it is expected that programmes will be initiated by the departments. However, where either the CFICE or the Coordinator feel that a new programme in a given department may be desirable, they may ask the department to consider initiating such a programme. The final decision, however, rests with the department concerned.

When a department has decided to initiate a new programme, it will form a programme committee which will be responsible for submission of a proposal to the CFICE. If the CFICE agrees with the proposal in principle, it will then direct the Coordinator to conduct a feasibility study. If the feasibility study is positive and if the department approves of the programme in its final form, the programme will be implemented by a formal sub-committee set up by the department.

ii) Implementation

The departmental sub-committee will normally become the area programme sub-committee, and have one of its members elected to the CFICE.

iii) Admissions procedures

With the cooperation of the admissions office, students admitted to the university and the programme of their choice who have applied to the Institute will be assessed according to several criteria.

On application a student will provide the Institute with a short resumé describing his/her past work experience and his/her reasons for choosing a co-op education.

This resumé and the student's academic record will form the basis for selection of those students who will be invited for a personal interview.

The purpose of this interview is to gain a more direct impression of the applicants and to assess their language proficiency. (See Section VI. i for details)

iv. Enrollment

In order for the Institute to be successful, we envisage that the initial enrollment will be in two to three areas in which feasibility studies have indicated that a minimum of 25 students can be accommodated. When these programmes have been successfully established, any number of new programmes can then be considered. In general, the number of students enrolled in any single programme will depend on the number of positions available as indicated by the feasibility study.

v. Job finding

The process of job finding will take place on two levels. At the first level the industrial sub-committee will be responsible for long range planning and maintaining a constant contact with potential employers through newsletters and reports.

At the administrative level the Coordinator will be responsible for soliciting jobs from the public and the private sectors. It will also be the responsibility of the Coordinator to maintain records concerning the jobs available to students within the programmes.

Once the Coordinator receives job descriptions from an employer; these will be passed on to the appropriate programme sub-committee(s). The latter will evaluate the jobs for their suitability to their programme(s).

vi. Job matching

Before each work-term students have to be assigned to appropriate jobs. In order to protect the interest of students and employers the Institute will post all job offers in its facility. The students would inform themselves about the available positions and each file with the Institute a list of ten openings which are acceptable to him/her ranked according to his/her preference.

The employer will be given all applications to the job offered by him with the usual documentation about the applicant (the student will have the right to withhold all or parts of this documentation).

The employer would usually indicate to the Institute which students he wanted to interview. The interviews will take place in the Institution facilities after which the interviewer will hand a list of students to the Institute indicating the employers' preferences.

The Institute will then match students and jobs according to the preferences. Students and employers agree to accept the decision of the Institution.

The Institute, although it will make every effort to place all students in its programmes in appropriate positions, cannot guarantee employment. A student who cannot be placed for two work-terms will automatically lose his/her cooperative standing and return to a normal undergraduate programme.

vii. Job evaluation

The criteria used for assessing job descriptions will include a consideration of the applicability of the academic programme to the individual job. The other major criterion for evaluation will be the amount of potential

learning and experience that the job will offer the student. (Refer to Appendix IV for example of job description which we would consider suitable for different programmes). Any problems or criticisms encountered by a student or by industry concerning a job situation will be channeled through the Fellow concerned who can then deal with the problem or consult with the Coordinator (See Section V. viii. for details).

viii. Mechanism for feedback

In the case of a cooperative educational programme the utmost care must be taken to ensure that the channels for feedback are well-defined and easily accessible. Two main directions of feedback are anticipated, one from the student, the other from industry.

As the student has been assigned a Fellow as his/her advisor, the most natural pathway for the student would be to direct his/her complaints to this Fellow who in turn may take appropriate action or, by using his/her judgement channel the affair to the appropriate level of the Institute.

Industry may choose two approaches: either informing the Coordinator, or working through the industrial committee.

We believe that minor matters can be dealt with completely at the Coordinator level. We define as minor those problems that concern individual students. Major complaints, i.e. those which concern whole programmes or groups of students, should be directed by the Coordinator to the committee for co-op education. This committee will rule on the matter or delegate it to one of the sub-committees. If the committee deems the problem serious enough it may create a special consultation committee to concern itself entirely with this affair.

VI. CURRICULUM AND RELATED MATTERS

We recognize fully that the curriculum for any programme at the Institute is the responsibility of the department concerned. The students in the cooperative unit will be enrolled in the normal major, specialization or honours programmes of the department in which they have registered. Beyond the requirements for the Bachelor's degree, they will be required to complete a specified number of work terms for which they will not receive academic credit. In addition to this, students will be expected to attend workshops, seminars and special lectures organized by the Institute.

The input of the Institute to the academic curriculum of its students will lie in the specification of some elective courses which the student must take within a certain cooperative programme.

For any given programme, the Institute will necessarily have to develop a study/work programme which will permit the scheduling of required and elective courses for its students. This may have consequences at the departmental level. Departments involved may be asked to re-schedule some of their courses to accommodate students who might be in a work-term during the normal scheduled period for a course (i.e. we may request that some courses be offered during the summer session and guarantee a minimum of 20 students).

i) Relationship between work-terms and academic terms

In any cooperative programme, a student normally commences and finishes his studies with an academic term.* Between these two, a student will alternate academic with work-terms in a manner adopted for a particular programme.

There will not be more than two consecutive work-terms in a schedule.

* (Work-terms are of the same duration as academic terms.)

To be considered as a cooperative programme, it will be required that a student successfully complete a minimum of three (3) work-terms. The maximum number of work-terms for students of the Institute will be five (5). A student who fails more than one work-term, according to the criteria outlined in the section on Job Evaluation, will automatically lose his/her cooperative status.

A student is considered to have satisfactorily completed a work-term when the report submitted by his/her employer has indicated a satisfactory performance in the job and when the student's report on the work-term has been read by a Fellow of the Institute and judged satisfactory.

Students will normally be expected to spend at least two (2) consecutive work-terms with one company, but will otherwise be encouraged to seek different work experiences.

ii) Role of elective in the Institute system

The main function of the elective courses in a student's programme will be to bridge the gap between the core (required) academic courses of a department programme and the requirements of a particular career orientation. For this reason, the Institute would maintain a fairly rigid control over the electives which a student may take through a close advisory process.

We recognize two different types of elective courses; those which are part of the basic departmental curriculum (area electives); and those which are normally free electives.

a. Area electives - in any department it is electives such as these which enable a student to stream into a particular orientation within the discipline. The Institute would counsel its students to make rational use of these electives, considering their own career goals. At present, many departments use such electives to stream students internally. The Institute would encourage the continuation of this practice and would work with the departments to develop new career-oriented streams, drawing upon the ties created with industry.

b. Free electives - our prior consultations with industry have clearly shown that there are areas of knowledge in which they feel students in both the Arts and the Sciences are deficient.
For this reason the Institute will require that up to two-thirds of the co-op students' electives will come from these areas. In this way not only will scheduling problems be reduced, but students will graduate with a package of "elective" courses which will help them move directly into responsible positions in both the public and private sectors. The remaining one-third of the free electives would be left to the choice of the student.

iii) Writing skills

Reports like "Writing Skills in Ontario", University of Waterloo, June 1-3, 1978 are reflected in kind by the report of the curriculum committee of the faculty of Arts and Science, Concordia University and the comments of representatives of industry. The Institute recognizes the seriousness of this problem and the difficulty of finding appropriate remedies at university levels.

However, every effort will be made to include such considerations in the admission procedure as well as to encourage the cooperative students to improve their report-writing skill e.g. by taking courses designed by the English Department for this purpose. Thus, the students will be provided with a scheme and model for their work-term report. An interim report will be required half way through the work-term and a final report at the start of the following academic term. These work-reports will not only be considered from the point of view of content, but also with regard to writing skill. A competition with prizes for the best report of each programme and each work-term will be held to further encourage the student's efforts.

The Institute will also encourage the academic staff and particularly its own "Fellows" to emphasize wherever possible the importance of good effective writing. It will also be the policy of the Institute to solicit a similar attitude from participating industries to maintain a continuous

emphasis.

Among the extracurricular activities, workshops will be arranged with the aim of further improving the student's skill in writing.

The members of the Institute recognize that these efforts by no means constitute a cure-all for the present situation; however, considering the difficulties that have to be faced with regard to writing skills it is felt that the measures that will be taken by the Institute go beyond simply setting a sign and that they will result in real improvements.

iv) Language

As Dr. Morin has noted, the present English high school system graduates already a large proportion of functionally bilingual students. This trend will continue in the future, particularly as the need for bilingual personnel is felt strongly in the work-place.

The cooperative Institute will make it its policy to graduate functionally bilingual students. To achieve this aim a mastery of English and French will be considered an asset at the time of admission. Students deficient in one of the languages will be required to take a test to determine their level of proficiency. Those students who achieve a score on this test which makes it realistically possible to attain functional bilingualism will be admitted under the condition that they pass a proficiency test by the end of their third term with the Institute. Students who fail this test can no longer continue in the cooperative programme of their choice; they may, however, continue their studies without any loss to their academic standing in the usual way. To enable the student to attain proficiency, the Institute will recommend courses and provide the student with a list of other facilities and programmes which would be suitable for the purpose.

v) Evaluation of work-term performance

During each work-term the student will be required to submit an interim work report after two months and a final report at the end of the term. The Fellow responsible for the student will evaluate both reports.

These reports will be used not only to judge the student's performance during the work period, but also as exercises in report writing. We repeat that, should a report not meet suitable standards, the student will either be asked to re-write it or he/she may be deemed to have failed the work-term. The final reports will be marked on a pass/fail basis.

At the completion of each work-term, the industry involved will be asked to submit a completed assessment form on the student. If the industry report says "unsatisfactory", the student will be considered to have failed the work-term. The student may appeal this evaluation to the Fellow responsible for the student. The Fellow's decision may be appealed to the Executive Committee of the Institute (CFICE). The existing student appeals procedures at Concordia University will not apply in appeals against an "unsatisfactory" work-term evaluation since it does not involve University "credits" for a degree.

The completed industry assessment form, the student's work-term reports and the original job description will be used by the Fellow and appropriate authorities of the Institute for a continuing evaluation of the student's progress and of the quality of the jobs supplied by industry (See Section V., vi., vii., viii. for details).

Outstanding reports will be forwarded to other Fellows in the programmes for selection of prize winners (See Section VI., iii. for details).

vi) Extracurricular activities

The Institute for cooperative education will hold and encourage a strong extracurricular programme:

Seminars: will deal with a particular aspect of a subject area of special interest to students of this programme.

Workshops: will be held covering topics of importance to all co-op students. The work-related experience will be extended by teaching skills and giving insight into social aspects of work: report writing, interview techniques, resumés, job searching, human relations, leadership, etc. . . . .

Talks: members of the industrial and academic community will be invited to present their views and experiences to the cooperative students.

Social Gatherings: students will be encouraged to arrange social events which will enable them to identify with the college. These can also serve as occasions for prize-givings, etc. . . . .

For this Institute the extracurricular activities fulfill a vital role by stressing and maintaining contact with industry on all levels, making possible the exchange of ideas and experiences of students in work and academic terms and to provide a link to the graduated cooperative student and thus foster continuity within the student body of the Institute. Because of the many-faceted approach with attendance from all parties involved in the Institute, the student will also profit on a personal level.

CONCLUSION:

This proposal has discussed the possibility of establishing an Institute for Cooperative Education at Concordia University. The concept of Cooperative Education; its problems and advantages were analyzed.

The reasons why Concordia University should start a Cooperative Education programme were put forward. The value of this type of education to the student, business community and the university was delineated. The organization of the Institute was detailed and the curriculum described. An Institute for Cooperative Education at Concordia University is timely; it is what the student body wants. It has potential for growth and has the backing of the business community. All that remains is for the university community to take up the challenge and establish such a programme.

APPENDIX I

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APPENDIX II

COOPERATIVE UNIVERSITIES IN CANADA

McMaster University, Hamilton

Memorial University of Newfoundland,
St. John's

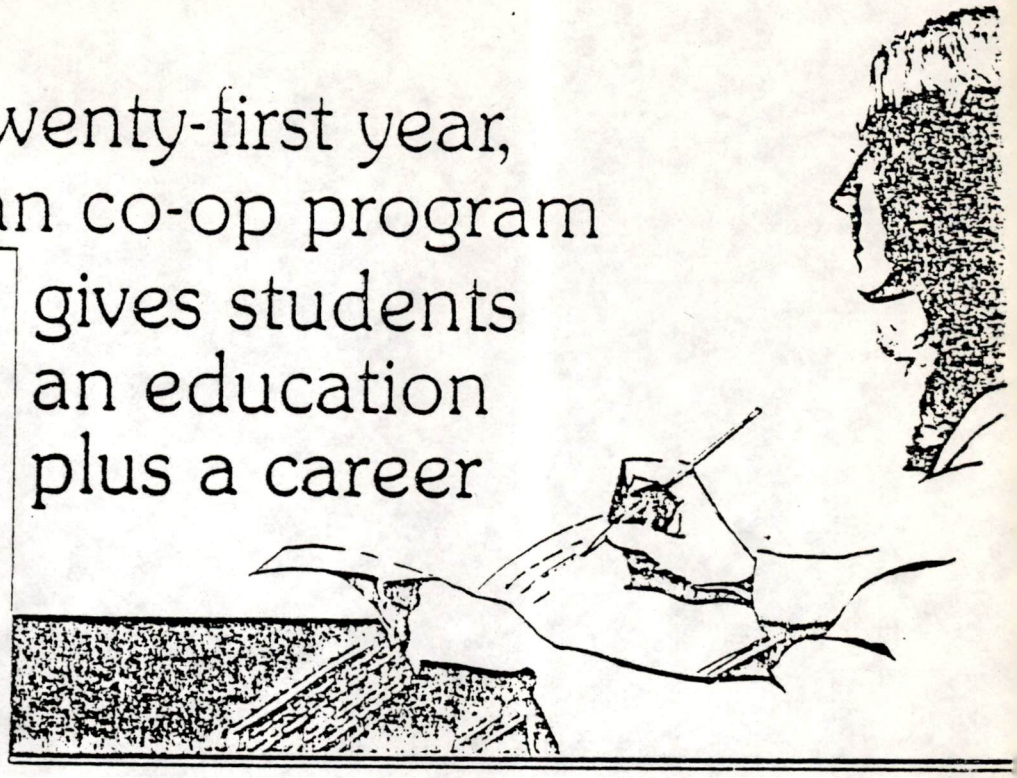
University of Regina, Regina

University of Sherbrooke, Sherbrooke

University of Victoria, Victoria

University of Waterloo, Waterloo

Now in its twenty-first year, the Canadian co-op program gives students an education plus a career



by Gordon Lancaster

The University of Waterloo this year celebrates the 21st anniversary of introducing co-operative education into Canada. Nevertheless, until relatively recently there was little evidence of widespread interest in co-op in Canadian colleges and universities. Certainly, prior to 1977, a few special institutions did operate co-op programs but growth had been slow and deliberate.

In the last two years we have seen a remarkable surge of interest across the country, stimulated in part, no doubt, by the Honourable Bud Cullen's promise of funds to subsidize the introduction of new co-op programs. It should be emphasized though, that these funds are once-only contributions and co-op does require an on-going institutional financial commitment.

The Canadian Association for Co-operative Education (CAFCE), formed in 1974, is an association of Canadian co-op educators and employers. According to a survey of its members conducted in 1977, the following member institutions offer co-op programs today:

COLLEGES

Dawson College, Montreal, Quebec
Fanshawe College, London, Ontario
Georgian College, Barrie, Ontario
Mohawk College, Hamilton, Ontario
Northern Alberta Institute of Technology, Edmonton, Alberta
Red River Community College, Winnipeg, Manitoba
Seneca College, Toronto, Ontario

UNIVERSITIES

Memorial University, Newfoundland
University of Regina, Saskatchewan
University of Waterloo, Ontario
University of Toronto, Ontario
University of Sherbrooke, Quebec
University of Quebec, Quebec
Lethbridge University, Alberta
University of Victoria, British Columbia
Wilfred Laurier University, Ontario

TERMINOLOGY

The term "Co-operative Education" has been loosely used to describe virtually every inter-relationship between academe and the world of work. In an effort to minimize confusion in the minds of employers and educators, CAFCE has adopted the following definition of Co-operative Education:

"Co-operative Education is a process of education which formally integrates the student's academic study with work experience in co-operating employer organizations. The usual plan is for the student to alternate periods of experience in appropriate fields of business, industry, government, social services and the professions. Co-op programs will be in accordance with the following criteria:

A. Each work situation is developed and/or approved by the institution as a suitable learning situation.

B. The student is engaged in productive work rather than merely observing.

C. The student receives remuneration for work performed.

D. The student's progress on the job is monitored by the institution.

E. The student's performance on the job is supervised and evaluated by both the employer and the institution.

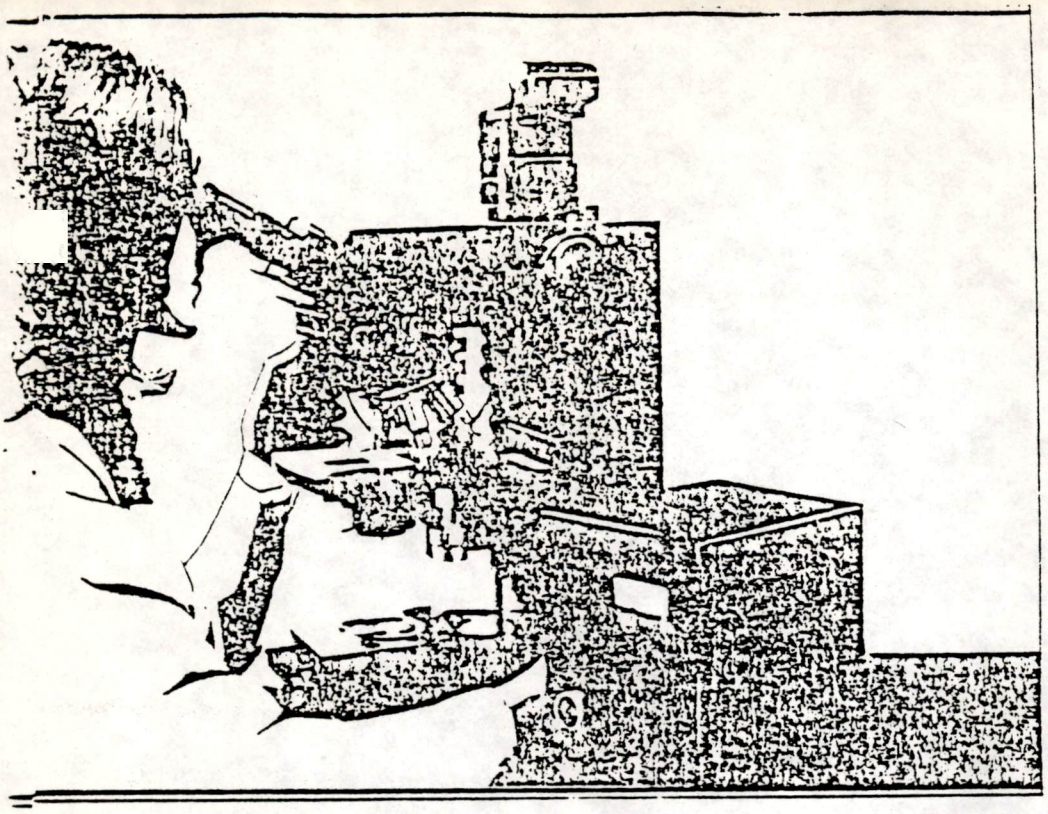
F. The total co-operative work experience is normally 50% of the time spent in academic study, and in no circumstance will this figure be less than 30%."

At the same time, we recognize that there are many other forms of equally valuable experiential education systems. Indeed many of these co-exist harmoniously with the more precisely defined co-op programs at a number of co-op institutions. A small start has been made then, to develop a taxonomy of experiential education descriptors and, in time, we hope some order will emerge from the current confusion of terms.

HISTORICAL DEVELOPMENT

Since Waterloo launched Canada's first co-op program in engineering in 1957, the number of program offerings has grown to more than 72 at the last count. The University of Sherbrooke started into co-op in 1965 (again with Engineering), followed by Memorial University and the University of Regina in 1968. Fanshawe College and Mohawk College were the first Community Colleges to be involved and their initial programs were launched in 1969. So, by 1970, six universities and colleges in Canada had embarked upon co-op and in terms of co-op student numbers, these six still dominate the field.

Science and Technology, on a Canada-wide basis, still account for the majority of co-op student enrollments (1977) with 6502 students representing 59% of the total. Business programs, including mathematics, computer science, marketing, accounting and economics as well as business administration, had a total enrollment of 3236 (29%). The balance of 1384 (12%) included programs in art, advertising, architecture, geography, kinesiology, recreation, public administration, education, legal, fashion, and resort and hotel management. Who does what in co-op; how they do it and, the individuals to contact, is summarized in the Directory of Co-operative Education in Canada, recently published by CAFCE.



WHY CO-OP?

Critics of Canada's universities and colleges lament the millions of dollars spent annually to produce allegedly ill-prepared, impractical graduates who, it is said, expect top jobs the day they graduate. There are a lot of unreasoned exaggerations and public misconceptions about this subject. Co-op is an excellent weapon with which to fight such misconceptions.

Experienced co-op employers like the system. Extensive research[1] has shown that co-op is a fine recruiting tool for companies with a serious interest in developing high calibre candidates for future management positions. Co-op is the stated preferred method of hiring, from colleges and universities, for some major employers in Canada and the U.S.A.

Teachers agree, almost without exception, that students returning from co-op work terms demonstrate increased motivation in the lecture theatre and the laboratory.

Not only is co-op justified by increased learning in the cognitive domain. Of equal importance is the acceleration in student maturation. Constructive attitudes, self-confidence, self-reliance, skills in interpersonal relationships, dependability, initiative, realistic career expectations, an ability to meet deadlines, a desire to work, mobility, skilled job search techniques – these are the hallmarks of a co-op graduate. That co-op also increases the profitability of participating businesses and industries is good, because this allows the system to continue and to develop.

WHY ISN'T THERE MORE?

Co-op education costs extra money. Colleges and universities must establish where their priorities will lie in this climate of diminishing support, both in public opinion and in real dollars. Although costs vary from institution to institution, I would guess that each co-op student costs an average of about $300 per year more than his non-co-op counterpart. With 11,122 students in co-op in 1977, we are looking at a staggering estimate of $3.34 million, committed by co-op schools in Canada towards, what they consider to be, a better strategy of learning. There is no recognition of these costs in provincial funding arrangements. To offset part of this additional cost, some institutions charge co-op students an extra fee.

A few faculty members oppose co-op – and for a variety of reasons. A very strong school of opinion, mainly in the universities, would argue that higher education is better enjoyed, and is more valuable for the student, in a cloistered environment insulated from the hustle and bustle of the real world outside. We co-op educators hold just the opposite view.

Although most are ardent supporters of co-op, a significant minority of faculty members resent the real intrusion that co-op introduces into a hitherto comfortable and uncomplicated academic year. A year which stretched from September to April provided enough time to do all those things, which, it is argued, teachers needed to do to keep professionally updated.

The introduction of year-round operations causes psychological and practical problems for teachers and administrators alike. Scheduling problems abound. Contractual agreements cause unforeseen problems. (Who wants their vacation in January and February?) Students have to readjust attendance patterns inculcated over 12 or 13 years of prior schooling. It just isn't easy to make the whole thing work. A determined commitment by everyone from the President down is an absolute prerequisite.

Institutions considering the introduction of co-op often do not realize the length of advance time needed for adequate planning and preparation. In the early days of selling this 'new' notion to employers, many unproductive calls are inevitable; patterns of student attendance at college and at work have to be developed to suit employer needs; sales literature must be produced; the message must be disseminated to students and colleagues; often the curriculum will require reorganizing so that first work-term students will have developed skills and knowledge that can be used on the job. It is essential that co-op educators have an answer to the inevitable employer question "If I hire one of your students, what will he be able to do for me to increase my profit?"

To complete all of these tasks, full-time co-op preparations must commence at least one year before the start of the first work term. One person working full-time for one year might reasonably expect to generate 25-35 appropriate co-op work places.

THE FUTURE

Do the educational benefits then, justify the costs and the headaches? This is a question for each college and each university to answer. For some of us the answer is clearly 'yes'. From others we hear a resounding 'maybe' and, for many, I suspect, the answer will remain 'no'. It would be foolish to suggest that any one strategy of learning is best for all students. Clearly this is not so. But for many students co-op does offer significant advantages.

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[1] Richmond A. Hayes and Jill H. Travis, *Employer Experience with Co-operative Education: Analysis of Costs and Benefits* (Detroit, Mich.: Detroit Institute of Technology, August, 1976).

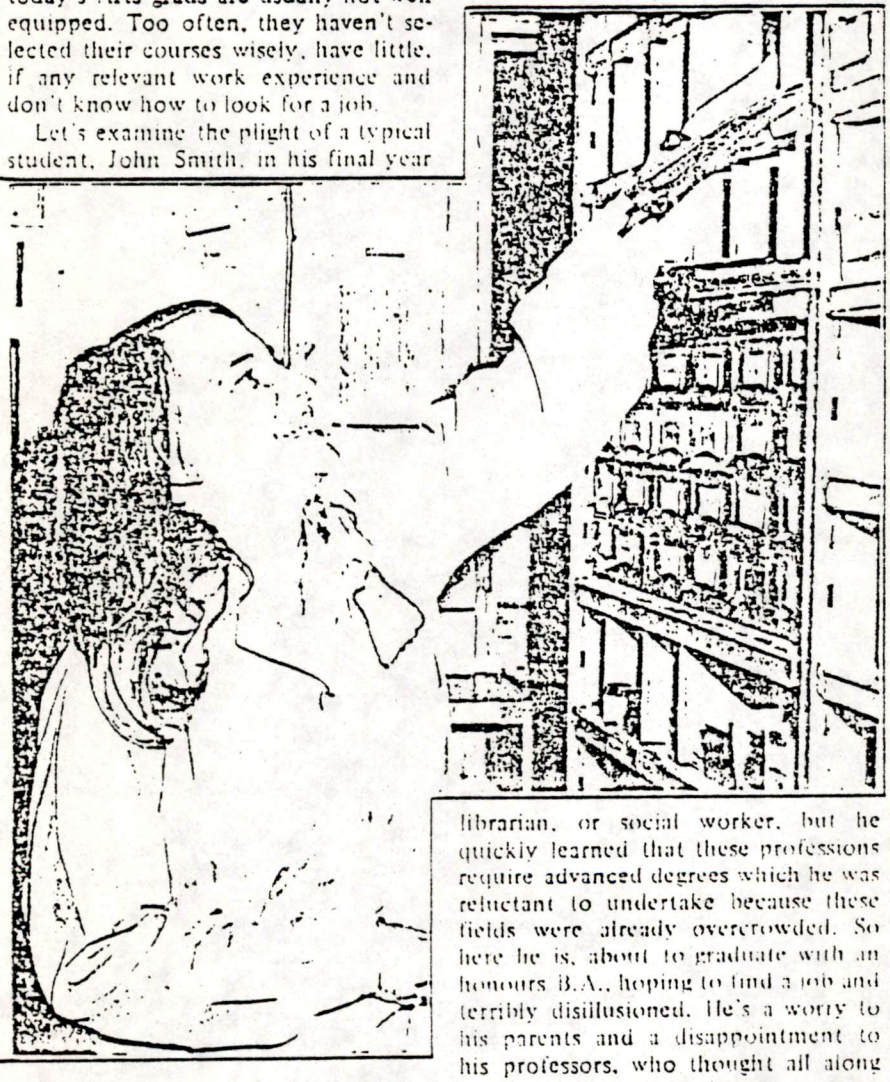
Gordon Lancaster, P.Eng., is the Director of Co-operative Education and Placement at Fanshawe College in London, Ontario, and is President of the Canadian Association for Co-operative Education – the national association representing post-secondary co-operative education institutions.

BA's co-opt for a better future

by Raymond J. Wieser, Director, Co-ordination and Placement, University of Waterloo

Who says you can't get a job with a B.A. these days? Just about everybody, it seems. But the fact is, it's just not true! People equipped for the right jobs will have no trouble getting them. Unfortunately, it is true that today's Arts grads are usually not well equipped. Too often, they haven't selected their courses wisely, have little, if any relevant work experience and don't know how to look for a job.

Let's examine the plight of a typical student, John Smith, in his final year of an Arts program. While still in high school John had been overwhelmed by the many career choices open to him. He registered in Arts, hoping to gain time. For his first year, John selected courses from a long list according to his best subjects in high school. He continued to follow his interests with little knowledge of, or apparent concern for, what might appeal to a potential employer. He neither sought nor received guidance from a faculty advisor or career counsellor.



Disillusioned

John worked as a labourer in construction for a family friend and earned good wages each summer. He avoided the campus placement office, knowing that they had no summer jobs, and were only interested in engineering and business grads anyway.

During the last few years, John considered becoming a teacher, lawyer, librarian, or social worker, but he quickly learned that these professions require advanced degrees which he was reluctant to undertake because these fields were already overcrowded. So here he is, about to graduate with an honours B.A., hoping to find a job and terribly disillusioned. He's a worry to his parents and a disappointment to his professors, who thought all along that he was in their classes to get an education. Some day John will appreciate those classes, but right now he's bitter. There is no use in telling him that he'll eventually get a job and begin a career, and there is little point now in telling him what he should have done.

John and the others like him are victims of the times. They grew up during a period of affluence, and were encouraged to have high expectations, only to end up looking for a job at a time when the economy cannot absorb all the newcomers to the labour force.

They are also victims of the law of supply and demand. When the supply exceeds the demand, the demand includes new specifications. When employers have many candidates to choose from, they'll naturally demand more credentials if for no other reason than to speed the selection process. Usually, their expectations are reasonable and they invariably require a high level of communication skills, both written and oral.

Free Choice

Arts graduates who have taken courses in accounting, industrial psychology, economics, marketing, and statistics, for example, are more interesting to employers than those who have concentrated exclusively on the study of the humanities or social sciences. Unfortunately, most students do not know which courses will be better than others when it comes to getting a job.

There will always be some university students who do not want structured programs or one with even the slightest career orientation. They should have this privilege, but not the right to expect a job upon graduation. I'm convinced that the majority of students expect the university to provide a focus of study and that the freedom of choice for students in Arts faculties is valued more by the faculty members than by the students.

Fortunately, it is possible to maintain and probably enhance the integrity of a Liberal Arts program and also incorporate job preparation by including a variety of applied or "skills" courses. To do so, an institution has only to improve its career planning and course selection advice service to individual students. The concern with this approach is consistent guidance from several faculty advisors. It's better that "packages" of courses within disciplines be developed, specifying certain required courses and strongly recommending others, thereby reducing the number of true electives.

Arts Co-op

The University of Waterloo has gone one step further by recently introducing several co-operative education programs within the Faculty of Arts. Co-op programs are now available to students in the Departments of Econom-

ics, English, and Political Science; and students in Anthropology, Sociology, and Psychology may soon be offered a co-op behavioural science program. Although admissions to these co-op Arts programs have been restricted until we gain experience, there has been strong employer support and virtually all students have been placed in jobs relating to their studies (see table). Depending on the program, at least four four-month satisfactory work terms are required for graduation. Co-op Arts students are subject to the same regulations as the co-op students in Waterloo's Faculties of Engineering, Environmental Studies, Mathematics, Science, and Human Kinetics and Leisure Studies.

Over 6000 of the University of Waterloo's approximately 14000 full-time students are registered in co-op programs. The University has had over 20 years experience with co-op. Not many of Canada's Faculties of Arts could or would necessarily want to introduce co-op programs, but they all could reassess their roles. Some moves to bridge the world of study and the world of work are probably in order in today's changing society.

EMPLOYERS OF CO-OP ARTS STUDENTS

Bank of Canada
Bedford Institute of Oceanography
Bell Canada
Canadian Broadcasting Corporation
Canadian Labour Congress
Canadian Press
Carling O'Keefe
Federal Government –
- Department of Secretary of State
- Ministry of State for Urban Affairs
- Public Service Commission
- Statistics Canada

General Foods
Globe & Mail
Goodyear Canada
Humber College
IBM Canada
Informetrica Limited
Kitchener-Waterloo Record
McGraw Hill Ryerson
McMillan Publishing
Metro Toronto Police Department
Mobil Oil
Ontario Government –
- Ontario Ministry of Colleges and Universities
- Ontario Ministry of the Environment
- Ontario Government Members Service Bureau
- Ontario Ministry of Health
- Ontario Ministry of Housing
- Ontario Ministry of Industry and Tourism
- Ontario Ministry of Natural Resources
- Office of the Premier of Ontario
- Provincial Office of the Legislative Assembly
- Ontario Ministry of Treasury, Economics and Intergovernmental Affairs

Port Elgin Secondary School (Burlington)
Regional Municipality of Durham
I P Sharpe & Associates
J J Singer Consulting
Thorne Riddell
Woods Gordon & Company

Personal success with the work study syndrome

by John Southcott

During his first two work terms as a co-operative student at the University of Waterloo, John Southcott was employed by the Canada Systems Group Limited. Here is his report on a successful marriage between academe and the business world.

There are many reasons why one chooses to enter a co-op program. The major reason I chose co-op was to find out exactly where my education was leading. Coming out of high school, I had no idea what I wanted career-wise, or even what was available to me in my main area of interest, mathematics. Waterloo's co-operative program offered a chance to experience the practical side of my field of study.

Another aspect that attracted me was the variety of the system (going to school for four months and working for four months). There is also the opportunity to attend school during the summer. The May to August 1978 term was my third consecutive summer session at school. There are only about 4000 students on campus then (compared to 16000 during the regular year), so many advantages result: smaller classes, with more individual attention given to students; exams being only seven days as opposed to the usual three weeks; and the last three weeks of August are free (for holidays, etc.), before the fall work-term begins.

During the course of a co-op education, students sometimes find it beneficial to switch streams. In other words, take two work or academic terms in succession. I switched streams so that I could return to school in the summer, and also because I wanted to take my second academic year (considered the most difficult) in the regular eight month period.

How I Obtained Co-Op Employment

You might wonder how someone just out of high school who has no data processing experience can get a job. First year students at Waterloo have the co-ordination department to thank. My first job was at the Canada Systems Group Limited (CSG), located in Mississauga, Ontario.

I obtained my job through Waterloo's co-op placement system. Here, one simply obtains a copy of the 'Want-Ads', a newspaper containing descriptions of available jobs, and applies for suitable employment. My problem was that most of the jobs required students with some degree of experience. At the time, the only experience I had that tied me in with computers was writing a few small Cobol programming assignments in my first year computer science course. Fortunately, there were institutions like CSG willing to hire an unexperienced student.

I applied for ten jobs and through cancellations and screenings I had three interviews. CSG's interview was by far the most impressive. In the general interview they showed a company film, outlining exactly what the company did, and how an individual fits into the organization. My individual interview was short. Since I had no business background to go over, I was only asked a few informal questions. Through the selection process, where prospective employers and students rank each other in order of preference, I got the job.

My Work at CSG

To say the least, when I started at CSG I was nervous. I worried about my inability and my ignorance of the data processing world in general. Words like 'IPL – MVS – JCL 370' were being used as if they came right out of Webster's Dictionary. This truly frightened me. But the initial fear soon wore off as I was given six weeks of training in the CSG education centre.

Courses that I participated in included IBM/VS Cobol, IBM Systems 370, job control language (JCL), and an extensive course on IBM utilities. These courses prepared me for practical, productive work.

The first project I was assigned to was to write an education information system. The system was to report such information as the number of students taking a particular course, course demand, and total hours spent on courses. The system has now proved to be a helpful tool for the education staff.

My next experience in the first work-term was as an administrative assistant. At the time, CSG was going through an organization change, and someone was needed to help out in the paper-work, and to insure that all administrative tasks were carried out properly. The remainder of the term was spent in the software development area, where my work led me into extensive use of the interactive time sharing option (TSO), IBM cataloged procedures and a fair amount of programming. In all, my first work-term was an exciting exposure to the business world.

Looking back, I would have to say that my second work-term, spent in the communications department, was the most satisfying, however. The firm had just purchased a Hewlett-Packard 2000 mini computer, and I was assigned to the implementation team. I participated in all of the aspects of the project, from initiating the system and handling a variety of problems to helping people use the system. I did work along the software lines writing several user utilities, including a basic language preprocessor, which allows free-formatted basic, and full screen browse, a basis for full-screen edit. Under my supervisor, and the manager of communications I was given freedom to work independently, and allowed input into discussions and meetings. The implementation of some of my suggestions was very self-fulfilling.

My third work-term was again spent in the communications department. There I wrote a much needed extensive reporting system on line usage by CSG customers located throughout Canada. The system gave a useful re-

judge precisely how well customers were being served.

My other work included developing a data entry system for C.I.P.S. (Canadian Information Processing Society), and modifying CSG's teleprocessing control system. I also spent a week at the IBM education centre in Toronto taking introductory communications courses, which served to increase my knowledge and interest in the subject.

My fourth and final work-term at CSG was spent in the applications development area, writing systems for customers. I spent almost my entire work-term on a publishing company's project, converting them to our system. I wrote several Cobol and Easy-Trieve modules for the project, as well as file conversion programs.

Summary Reports

During my four terms at CSG, I wrote three work reports. My first report compared the traditional card input system with interactive time sharing, and the reasons why some programmers resisted the change. The report not only gave me good writing experience, but it allowed me to talk to people and find out their views. Included in the study were cost comparisons and time-studies, but the way people felt made up the heart of the report.

CSG provides a wide range of extra-curricular activities for their employees. Hockey, basketball and company dances were activities that I particularly enjoyed.

Since there are so many co-op students in Toronto, 'Co-Op Pubs' have been organized. The pub groups meet every Wednesday night, at a different place each week. Students find out where the pub is located by phoning the 'pub-line' and listening to a recorded message. The message gives details on location of the pub, the entertainment and drink prices. The location is pre-arranged with the management of the pub so that co-op students do not have to pay a cover charge. The turn-out is usually good and we always have a good time.

To sum up my feeling on working at CSG, I learned that data processing is a competitive business, not just a means for developing new technology. I was exposed to both the technical and customer-oriented aspects of the work. Although I was only at CSG for four month intervals, as time went on I felt more accepted by people, and was given more responsibility and more challenging work. The people were, for the most part, friendly and willing to help me with any problems that I could not solve. The working environment taught me self-discipline, as there was no one strictly supervising me. I four terms was very fair. The training I received was invaluable in keeping up to date on current technology.

Academic Benefits of my Work Experience

My work at CSG made my computer science courses at school a lot easier to understand. I had no trouble picking up any programming language after just four months at CSG. The reason for my increased awareness of computers stems from concentrating on the subject on a full time basis, eight hours a day for four months. At school, I had five other subjects to worry about. After concentrating on data processing for an extended period of time my computer marks at school rose a great deal.

I feel now that I understand what computers are all about. My understanding of concepts such as structured programming comes from the individual attention I received at work. I also feel that my work experience has proved to be an asset in my business administration courses. I am able to relate to real life situations in business, and handle case studies and class presentations from an experienced point of view. Needless to say, my confidence in the field has increased immensely.

FUNCTION OF COORDINATOR

The main administrative position of the Institute is that of the Coordinator . His/her responsibility may be sub-divided according to five main functions:

(1) ADMINISTRATION --

The Coordinator will supervise the administrative staff, ensure the keeping of records, maintain close contact with admissions and registration offices and be responsible for the student-job matching. Suggestions for scheduling, as well as the final checking of the practicability of the time-table, would be one of his/her duties.

(2) JOB FINDING --

For each of the programmes a job bank has to be established ensuring that all students in the cooperative programmes have, for every work-term, a choice of appropriate employment. Job descriptions have to be obtained from industry and presented for evaluation to the sub-committees.

(3) BUDGET AND ANNUAL REPORT --

The preparation of the budget for the Institute, which will be presented to the Provost by the committee, will be established by the Coordinator. Accompanying this budget will be an annual report which will record in detail the progress of the Institute. The approved budget will be managed by the Coordinator.

(4) RESEARCH AND DEVELOPMENT --

The approval of new programmes will depend on the results of feasability studies. These fall within the responsibility of the Coordinator. During the carrying out of such studies, the close contact with industry will facilitate the flow of information and the Coordinator may become aware of areas for possible cooperative programmes. Within the framework of his/her duties he/she may suggest the formation of a sub-committee. On the other hand he/she may also, relying on the information gathered, inform the committee about desirable adaptations of existing programmes. The growth of the Institute may make necessary special projects such as follow-up studies of graduates, gathering information to help the evaluation of programmes and surveys on potential student populations.

(5) CONTACT WORK --

The Coordinator will be responsible for ensuring that the functioning of the sub-committees, industry and students is facilitated.

CONCORDIA UNIVERSITY

INTERNAL MEMORANDUM

TO Dr, R. E. Wall
Provost - Arts & Sci.

FROM Dr. R. E. Townshend
Chairman - Dept. of Chemistry

DATE November 7, 1979

The Department of Chemistry is prepared to initiate a program in cooperative education and requests that once the Institute for Cooperative Education is established, the Co-ordinator begin a feasibility study in conjunction with the Department Cooperative Program Committee.

R. E. Townshend.

RET:sr